

Montana's Regional Water Systems



Prepared by the Montana Department of Natural Resources January 2011 Alice Stanley, Chief, Resource Development Bureau

Central Montana

Most of us have an ample supply of high quality drinking water. There are some areas of Montana, however, where the tap water looks bad, smells worse and does not meet federal drinking water standards. Some sources are highly mineralized or limited in quantity. Many rural water users and some small communities haul their drinking water.

Montana is building regional drinking water systems to change this.

Four rural water systems are currently in various stages of development. Two systems have been under construction for several years and now deliver water to 10 communities and many more rural customers. The other two systems are in the planning stages. When these systems are complete, hundreds of households will finally receive clean and plentiful drinking water from their faucets.

Every system is successful because of partnerships.

- The Dry Prairie Rural Water Authority began through efforts of local conservation districts and has teamed with the Assiniboine and Sioux Tribes on the Fort Peck Reservation;
- the North Central Montana Regional Water Authority has teamed with the Chippewa Cree Tribe of the Rock Boy's Reservation; and
- all four systems rely on cooperation and funding from local communities, the U.S. Bureau of Reclamation, and the State of Montana.

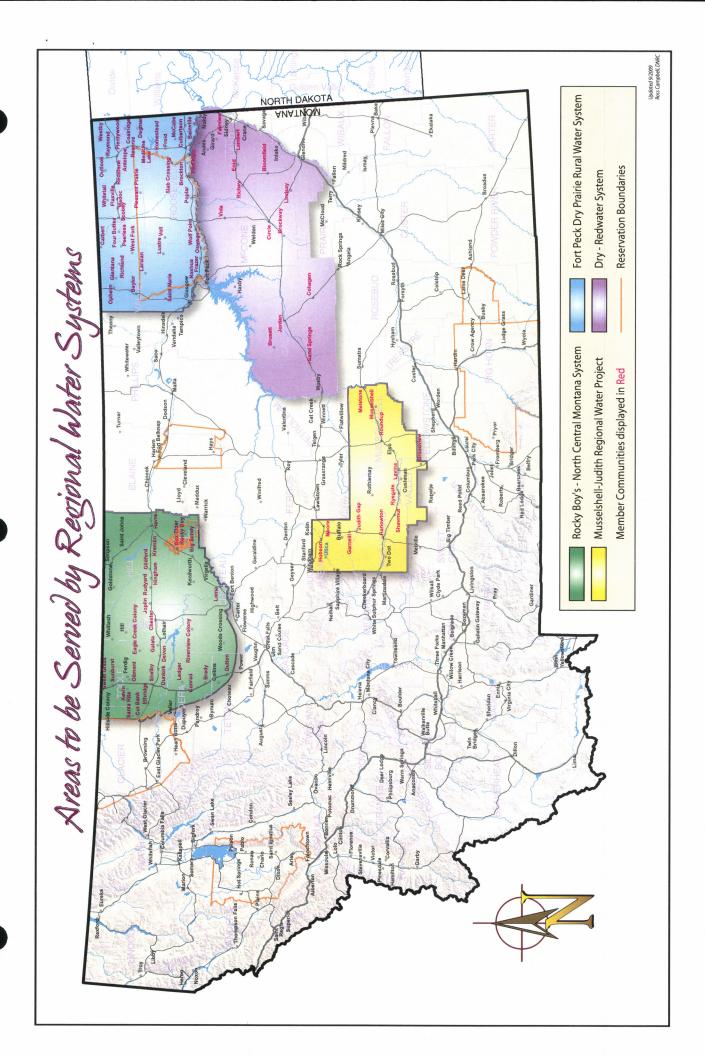


The Montana Department of Natural Resources and Conservation supports these systems by providing funding for all related activities including planning, community outreach, project coordination, design, construction and operational assistance.









Fort Peck - Dry Prairie Regional Water System

Northeast Montana has had an historical need for clean plentiful drinking water. Traditionally, groundwater has been the primary source of potable water in the area with concentrations of dissolved solids and sulfates generally higher than secondary standards for drinking water. Consequently, tap water has often been unusable for drinking and cooking. More recently, the region has experienced rapid population growth as development of oil reserves in the region has intensified increasing demand for drinking water.

Formation of a Regional Water System

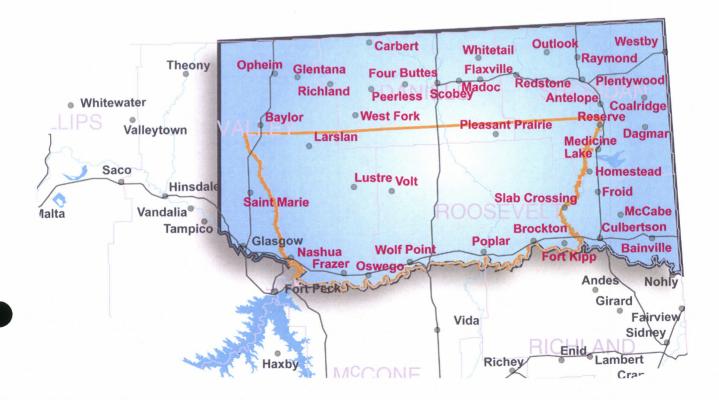
This system is the result of a successful joint venture between the Assiniboine and Sioux Tribes of the Fort Peck Reservation and nontribal individuals and communities adjacent to the reservation. The Assiniboine and Sioux Rural Water Supply Company partnered with the Dry Prairie Rural Water System to build a regional water system that promises to improve the quality of life for residents of northeast Montana.

Construction Status

The Dry Prairie Rural Water System now delivers water to about 2,000 service connections in five communities and rural households in Sheridan, Roosevelt, and Valley Counties. The Tribes constructed a raw-water intake from the Missouri River and water treatment plant near Wolf Point that now serves rural water users and communities in the southern portion of the system. When the entire project is completed, nearly 3,200 miles of pipeline will deliver drinking water to more than 20 communities and nearly 4,000 farms, ranches and rural homes.

Cost

Total estimated project cost is \$280 million. The combined state and local share of that amount is \$27 million. The federal contribution will be over \$250 million.



Rocky Boys-North Central Regional Water System

Poor quality drinking water, aging infrastructure, and increasing costs for communities to comply with state and Federal public water supply requirements drive the need for this shared drinking water system. Many member communities are either out of compliance with drinking water requirements or anticipate difficulty meeting future standards.

A Successful Partnership

A water rights compact between the Chippewa - Cree Tribe of the Rocky Boy's Reservation and the State of Montana allocates water to the Tribe from Tiber Reservoir located south of Chester. The North Central Montana Regional Water Authority was formed to partner with the Tribe in managing off-reservation water delivery systems.

System Design

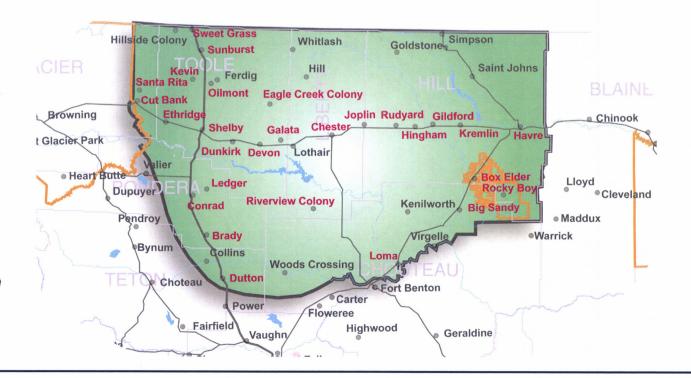
When completed, the entire system will consist of shared infrastructure, such as the water treatment plant and main pipeline, and two separately-managed systems. The on-reservation system is managed by the Chippewa – Cree Tribe who will wholesale water to the North Central Montana Regional Water Authority for distribution to off-reservation users. When completed, the entire system will serve about 10,000 households with an estimated population of 28,000.

Construction Status

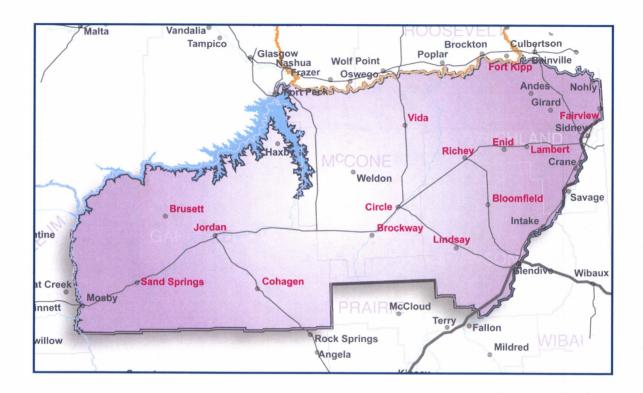
About 40% of the shared pipeline that will deliver water from the regional treatment plant to the Rocky Boy's reservation has been constructed. Until the treatment plant is complete, North Central Regional Water Authority will continue to supply drinking water to North Havre, the Riverview Hutterite Colony, and South Chester using interim water supplies.

Cost

Total estimated project cost is \$361 million. State and local share will be \$43 million, and the Federal Government is responsible for \$318 million of the shared infrastructure and Tribal water system.



Dry Redwater Regional Water System



Purpose and Need

The Dry Redwater Regional Water Authority was formed in 2005 to own and operate a regional water system that would provide household and livestock water to the proposed service area. The Project was established due to interest from local officials and residents of Garfield, McCone, and portions of Dawson, Richland and Prairie Counties in Montana; and to McKenzie County, North Dakota. The System will be designed to serve about 7,000 residents using water from Fort Peck Reservoir.

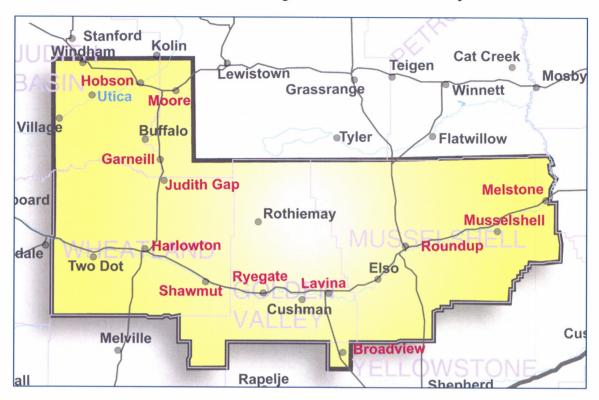
Authorization Status

Senators Baucus and Tester have introduced authorizing legislation for this project.

Construction Status and Cost

Dry Redwater has negotiated with the U.S. Army Corps of Engineers for a water intake location on the Dry Arm of Fort Peck Reservoir and will locate a water treatment plant nearby. Current engineering estimates of the cost for the expanded system are approximately \$230 million. The need for construction of a surface water treatment plant and the considerable distances involved in piping treated water account for much of the cost.

Central Montana Regional Water System



Purpose and Need

The Central Montana Regional Water Authority was established in September 2005, with a board of directors representing each community to be served on the regional system to help communities in Central Montana that have been plagued for years by poor water quality and quantity. Communities along the Musselshell River drainage have long had difficulty in obtaining reliable drinking water sources.

A Groundwater Supply System

Motivated by prolonged drought, the City of Roundup and Musselshell County began work seven years ago on a project to explore the Madison Aquifer on the northeast end of the Little Belt Mountains as a potential water source. Using groundwater to supply a regional water system will save the cost of building and maintaining a surface water treatment plant, and will provide more source diversity throughout the system than a conventional surface water supplied system.

Construction Status and Cost

The Regional Authority has drilled high production test wells near Utica and Garneill. After completion of a feasibility study and alternatives analysis, the Musselshell-Judith Regional Water Authority will pursue congressional authorizing legislation. This project is estimated to cost \$90 million for well development and the distribution system. Combined State and local share will likely be about \$22 million.

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